PETITION FOR RULEMAKING TO UPDATE CALOOSAHATCHEE MFL

CONSERVANCY OF SOUTHWEST FLORIDA

CALOOSAHATCHEE MFL 2001

- MFL was set in 2001
- 300 CFS at the S-79 structure
- Established based upon existing model and targeted towards achieving target salinity for protection of *Vallisneria*

CALOOSAHATCHEE MFL 2000 PEER REVIEW REPORT

- "REASONABLE DOUBT" AS TO WHETHER THE MINIMUM FLOW TARGET OF 300 CFS IS APPROPRIATE

CALOOSAHATCHEE MFL 2001

DISTRICT RULE 40E-8.011 FAC EXPLICITLY REQUIRED THAT THE CALOSAHATCHEE MFL BE REVEIWED WITHIN ONE YEAR AND AMENDED AS NECESSARY BASED UPON **BEST AVAILABLE INFORMATION**

PERIODIC REVISIONS NOT JUST CONTEMPLATED BUT MANDATED

- Section 373.0421(3) Fla. Stat. mandates that "minimum flows and levels shall be reevaluated periodically and revised as needed."
- Rule 40E-8.011(3) Fla. Admin. Code provides that MFLs are "based on existing **best available information**, and will be periodically reviewed, at least every five years, based on new information and changing water resource conditions."

WHAT BEST AVAILABLE INFORMATION SHOWS:

- THE 300 CFS AT S-79 DEPENDS UPON ANOTHER 200 CFS FROM THE DOWNSTREAM TIDAL BASIN TO ACHIEVE SALINITY CRITERIA

- DURING DRY PERIODS THAT DOWNSTREAM INFLOW IS > 200 CFS, AND SOMETIMES ZERO

- MINIMUM FLOW OF 300 CFS IS **NOT ENOUGH TO PREVENT SIGNIFICANT HARM**

THERE IS NOT ENOUGH SCIENCE??

Caloosahatchee River Watershed Protection Plan Section 3.4.2 (September 2009)

- "Subsequent analysis and documentation (including SFWMD, 2003b; Chamberlain & Doering, 2004) estimated that about **450 cfs** is required from S-79 to ensure the minimum flows and levels salinity criteria is achieved under most downstream tidal flow conditions. "

NE-3 Caloosahatchee Estuary Salinity Envelope (September 9, 2005) http://www.evergladesplan.org/pm/recover/recover_docs/et/ne-03.pdf

- "This estimated minimum flow level (MFL) depends on about 200 cfs of additional flow from the downstream tidal basin between S-79 and Ft. Myers. However, violations of the salinity criteria commonly occurs during dryer than normal periods in the dry season when the combined tidal tributary flows are < 200 cfs. **Therefore, a minimum flow of 300 from S-79 is not enough.** Greater frequencies of flows are needed from S-79 that approaches 500 cfs in order to achieve the intended salinity goals."

Final Caloosahatchee River (C-43) West Basin Storage Reservoir PIR and Final EIS September 2007 Section 2.10

- "during low flow conditions the entire system is drier than normal and the downstream contribution is much lower than 150-200 cfs, **so 300 cfs at S-79 is insufficient to achieve the MFL salinity criteria."**

Final Caloosahatchee River (C-43) West Basin Storage Reservoir PIR and Final EIS September 2007 Section 4.1.3.1

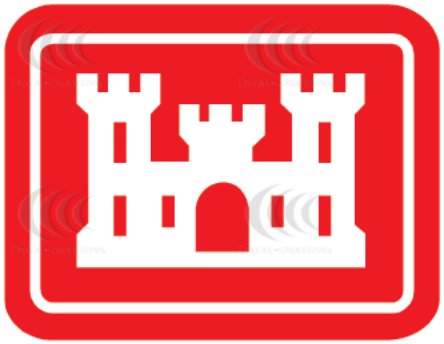
- Research by the SFWMD on the tidal Caloosahatchee **began in the mid-1980s** to determine the proper timing and volume of water required to support valued ecosystem components (i.e., such key estuarine species as oysters and SAV, such as *Vallisneria spp.)* and general biotic indicators (plankton and benthic invertebrates).

RESEARCH SINCE THE 80'S BUT STILL NOT ENOUGH SCIENCE??

Final Caloosahatchee River (C-43) West Basin Storage Reservoir PIR and Final EIS September 2007 Section 4.1.3.1

- As part of the state-mandated minimum flows and levels (MFLs) process, the SFWMD initially determined that a minimum dry season discharge at S-79 of 300 cfs (monthly average flow) is required to provide salinity conditions capable of supporting *Vallisneria;* **however, the minimum flow target has been revised upwards to 450 cfs based on more recent scientific research by SFWMD staff.**

DID SOMEONE PULL A FAST ONE ON THE CORPS?



US Army Corps of Engineers.

THE MFL IS TOO LOW–SO WHAT?

- Alice: I was just wondering if you could help me find my way.
- Cheshire Cat: Well that depends on where you want to get to.

THE MFL IS TOO LOW–SO WHAT?

- Local Basin (C-43) runoff is not currently restricted from allocation- public water supply and agricultural demands will continue to increase, new permit applications and requests for additional allocations will be received
- CUP rules require that consumptive uses must be “in accordance with the established minimum flows and levels”
- The LOSA rule allows the District to re-allocate "terminated base condition water" in order to lessen the frequency and duration of the MFL violations that cause significant harm preliminary estimate of additional water (15,625 MGY) available for discretionary use
- Permitting and policy decisions targeted to achieve compliance with an MFL based upon best available information, not one that is too low, even if compliance cannot be achieved immediately, even if the best means to get there is uncertain

WHY AMEND THE MFL IF WE ARE GOING TO HAVE A RESERVATION FOR C-43 RESERVOIR?

- **RESERVATION** FOR C-43 RESERVOIR IS TO ENSURE WATER NEEDED FOR RESTORATION OF THE NATURAL SYSTEM IS ALLOCATED FOR THE NATURL SYSTEM FIRST
- RESERVATION AND MFLs ARE DIFFERENT TOOLS INTENDED FOR DIFFERENT PURPOSES
- THEY ARE DIFFERENT TARGETS
- MFL IS TO PREVENT FURTHER SIGNIFICANT HARM **NOW -THERE IS ABUNDANT SCIENCE AVAILABLE TO REVISE THE MFL NOW**

WHERE WILL THE WATER TO COMPLY WITH A HIGHER MFL COME FROM ?

- More important question- where will the water go between now and when the C-43 reservoir is operational if the MFL is too low
- MFL is the point at which further withdrawals cause significant harm
- MFL too low, more water is allocated, those uses become a existing legal uses for the next 20 years
- Those uses potentially allow further deterioration of the estuary and definitely become a constraint upon future restoration efforts

WHAT SHOULD THE MFL BE?

- MINIMUM TO PREVENT FURTHER SIGNIFICANT HARM
  - 450 CFS
- OPTIMUM FOR A HEALTHY ESTUARY
  - 600-1200 CFS, 75% of the time
- NOT ASKING THAT THE MFL BE BASED UPON RESTORATION TARGETS, NOT ASKING THAT AN MFL BE SET TODAY

NOT ENOUGH SCIENCE?

- But we know that cumulative impact of withdrawal of 99, 635.65 mgm from Lake Okeechobee Service Area causes no environmental harm?

ULTIMATE GOALS

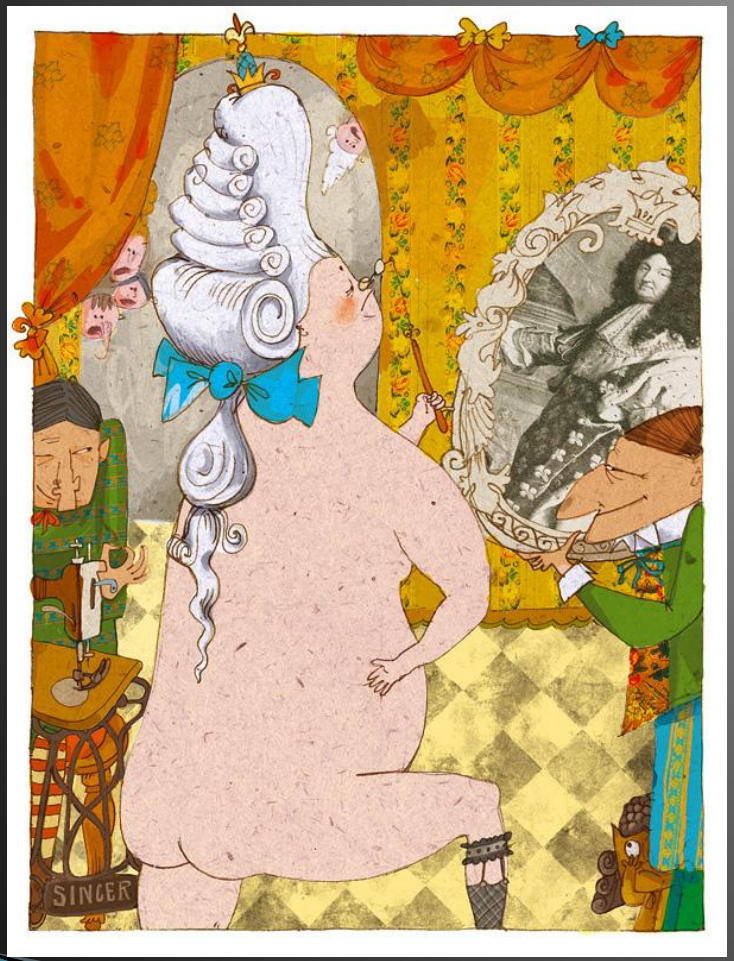
- Adoption of a revised MFL that is based upon best available science to prevent further deterioration of the estuary while waiting for funding, construction and operation of the C-43 Reservoir

- An updated recovery strategy to achieve the MFL that doesn't rely completely on CERP-it is time to start examining contingencies for protection and restoration of the Caloosahatchee

It is all a matter of agency discretion . . . .

- Initiate rulemaking to revise the MFL for the Caloosahatchee
- Direct that a revised MFL be brought to Board for consideration expeditiously based upon existing science

CONCLUSION



- POLICY DECISIONS AND PERMITTING DECISIONS SHOULD BE TARGETED TOWARDS ACHIEVING AN MFL THAT IF MET PREVENTS FURTHER SIGNIFICANT HARM, NOT AN MFL THAT EVERYONE KNOWS IS INADEQUATE